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ORNITHOLOGICAL CLUB

CONTENTS

The Birds of Molly Island, Yellowstone National Park (with two photos)	
M. P. Skinner	177
A New Subspecies of Geothlypis beldingi	182
FROM FIELD AND STUDY	
FROM FIELD AND STODI	
Western Robin and Sierra Junco Nesting in Alameda County, Califor-	1 *
nia	185
Sierra Junco Breeding at Berkeley	185
That Goshawk Invasion Again	185
The Goshawk in Southern California and Arizona	185
Some Field Notes for 1917	185
Condition of Game Birds in East-central California	186
Two New Records for the State of Washington	187
EDITORIAL NOTES AND NEWS	188
MINUTES OF COOPER CLUB MEETINGS	188
INDEX TO VOLUME XIX	190

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MEETINGS OF THE COOPER ORNITHOLOGICAL CLUB

SOUTHERN DIVISION: At the Museum of History, Science, and Art, Exposition Park, Los Angeles. Time of meeting, 8 p. m., the last Thursday of every month; or on the Tuesday evening preceding, when the last Thursday falls on a holiday. Take south-bound car from town; on Spring Street, the car marked "University", on Hill Street the car marked "Vermont and Georgia". Get off at Vermont Avenue and Thirty-ninth Street. Walk two blocks east to Exposition Park. The Museum is the building with the large dome.

NORTHERN DIVISION: At the Museum of Vertebrate Zoology, University of California, Berkeley. Time of meeting, 8 p. m., the third Thursday of every month. Take any train or car to University Campus. The Museum of Vertebrate Zoology is a large corrugated iron building situated on the south side of the campus immediately north of the football bleachers.



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Volume XIX

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THE BIRDS OF MOLLY ISLAND, YELLOWSTONE NATIONAL PARK

By M. P. SKINNER

WITH TWO PHOTOS

A THE southern end of Yellowstone Lake, twenty miles from the nearest tourist route and consequently secluded enough to tempt birds who prefer such a home, are two little islands rising only a few feet above the water. The islets are an eighth of a mile apart, each about four hundred feet long by two hundred feet wide, their summits eight to ten feet high. No soil is present, and the expanse of sand and gravel is broken only by a few larger stones and some rather bedraggled and discouraged bushes. From the fierce winds that sweep across the more open parts of the lake, these islets, the northernmost of which is known as "Molly Island", are nicely protected in a bay of the Southeast Arm, by the shore, a mile away.

California Gulls nest on Klamath Lake, Oregon, in considerable numbers, but are not reported as now breeding commonly east of there, save far to the northward, on Great Slave Lake. Hence I was greatly surprised at the gulls of Molly Island. Such reports as I could find noted the Ring-billed Gull (Larus delawarensis) as present and nesting in the Yellowstone; yet the California Gull (Larus californicus) outnumbers the former species greatly, although there are usually a few of the Ring-billed present. Both gulls and pelicans have been reported from Yellowstone Lake since 1870, but were not stated to be breeding there until 1890, although it is probable that such was the case long before the earlier date. From the best information obtainable, the colony has been holding its own in numbers and should continue to do so.

My first visit to Molly Island was in 1898, and during each season since I have returned one or more times to a scene that has never lost its interest. Molly Island is accessible from the Lake Hotel by either motor launch or small

boat. As one approaches, one is met a mile away by a gull or two circling overhead and screaming vociferously, followed by more and more gulls until the air is filled with a whirling, darting throng of gray and white birds. It is noticeable, here as elsewhere, that gulls are much noisier on the wing than on shore or on water. So alert and so ready are they to announce an intruder that they have well been called "chipmunks of the sea". About a thousand gulls are resident in the Yellowstone and practically all of them nest on Molly Island. Their nests are scattered in among those of the pelicans, but the gulls prefer the higher parts as a rule and leave the lower beaches to the larger birds. The nests of the gulls are a little the more pretentious, being formed roughly of grass stems with from one to three rather dark lavender eggs marked with black in an irregular manner. The gulls begin nesting from about May 15 to 25 and often before the ice has left the lake; the young gulls are hatched early in June, are covered with down of a gray color dotted with black, and are very difficult to see against a background of sand and gravel. They can run about almost as soon as they emerge from the shell, and are so adept at hiding that I did not become aware of their abundance on my first visit. Not until I retired under a blind and the little ones began to respond to the parents' calls did I really begin to see them. The young gulls, themselves, have a shrill, whining call.

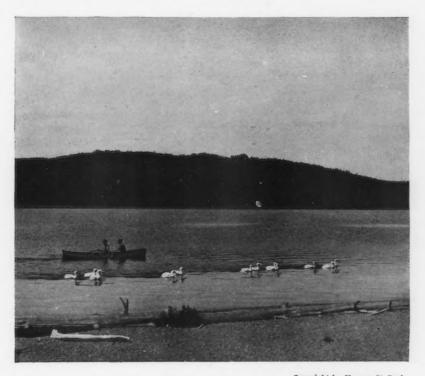
The gulls eat fish that they find dead, sometimes they rob the mergansers before the latter have a chance to swallow their catch; and many of the gulls resort regularly to the hotel garbage piles. While the bears are present, the birds sweep by in circles uttering their piercing screams; often they swoop down until they seem to miss the bears' backs by only a few inches. When the bears have satisfied their hunger and leave, the gulls settle down in a white cloud and soon clean up what bruin has left. At times when the gulls were resting on the water, I have seen one jump up two or three feet and plunge forward into the water. What they do this for, I cannot tell positively, but they

seem to be feeding.

Most noticeable of the water-birds of the Yellowstone, by virtue of his great beauty either when swimming or when flying past is the White Pelican (Pelecanus erythrorhynchos). On the water the pelican is grace personified. With head bent back and close to his shoulders, and with his deep pouch tucked away between chin and throat, he moves majestically along like a ship under full sail. Pure white except for the black wing-tips, he can be seen and recognized at an astonishing distance away. In flight, he is still more majestic. The main auto road runs beside the Yellowstone River at one point, and here the birds have become so used to the passing machines that they come near enough for the tourists to admire their great spread of wings (ten feet in some cases) and to hear the soft fluf-fluf of their pinions. The leader of a flock shows even better command than is the case with flying geese. Pelicans fly one behind the other, and, as a rule, vary their flapping flight with short periods of coasting upon deeply bowed wings. At the end of such a period, the leader loses headway first, possibly because he is subjected to air pressure that his followers do not feel, and recommences his wing-strokes first, followed shortly by the second bird; then the third and fourth take up the stroke after accurately timed intervals, and the entire line is finally in full, strong flight with wings beating together perfectly.

The pelican is an old form of bird-life that has come down to us little changed through long ages; certainly he existed before the first song-birds as

we know them now. If such as he had records, of what strange things could he tell us! What strange tales of the lost Atlantis and of the glacial epochs. The close resemblance of the European Pelican to ours would indicate that they were once a single species, for it is not easy to imagine two such similar forms developing eight thousand miles apart. Perhaps they are descendants of common ancestors who nested around the north pole when that region was far warmer than now, and before Europe and America were separated by the wide Atlantic! It is not easy to determine to how great an age individual pelicans attain, although they are believed to be long-lived.



Copyright by Haynes, St. Paul Fig. 55. Young White Pelicans on Yellowstone Lake

Little is known about the winter home of the Yellowstone birds, but it is probably at the head of the Gulf of California, near the mouth of the Colorado River. Large numbers of White Pelicans are known to winter there. A few also winter on the lakes of the Mexican plateau, and on the Gulf coast to the east. Still it isn't likely that our birds would wander as far as that, at least not regularly. The White Pelican does not breed along the sea coast, but retires in spring to the inland lakes stretching from Salton Sea as far north as Fort Smith in northern Canada. In Canada it breeds farther to the east, but the Yellowstone is the most eastern of the American colonies, although former-

ly the breeding range extended to Chase Lake, North Dakota, and even to Minnesota. Such an adaptability to the moist, showery atmosphere of Manitoba, to the cold mountain heights of the Yellowstone, to the northern wilds of Great Slave Lake, to the deserts surrounding Great Salt Lake and Pyramid Lake, and to the torridity of Salton Sea, is fortunate for the good of the species; else the peculiar conditions essential to a nesting colony would not afford sites enough for the maintenance of the race.

The species is holding its own fairly well, for while the number of colonies has been steadily decreased by the advancing civilization of the west, the number of birds in some of the colonies is increasing. The pelican requires peculiar conditions for his home. First, there must be an inexhaustible supply of fish. Kind of fish does not seem to matter, for on the muddy lakes of the Canadian prairies he eats pickerel and smaller fry with as great a relish as he does the toothsome trout of the crystal-clear waters of Pyramid and Yellowstone lakes. Second, as the bird cannot walk well the nest must be near the water. Third, the nest must be low to afford easy access to the water, in which the young swim long before they can fly. Fourth, the parents and the young are white, and such conspicuous prey must be protected from terrestrial prowlers by the isolation of an island. Fifth and most important, the island must be remote, to afford privacy. Hence breeding pelicans are restricted to large bodies of water remote (or protected) from man, and containing low-lying islands.

In the Yellowstone, the earliest of the returning pelicans arrive about May 1, but the lake is then usually still covered with ice, and the birds spend their time fishing in the open Yellowstone River. All through May the number steadily increases until there are about seven hundred birds; occasionally one or two wander to other parts of the Park but as a rule they confine themselves to Yellowstone Lake and to the river as far north as Hayden Valley. As soon as the ice disappears, and possibly slightly before, especially if the season is a late one, they resort to Molly Island and begin nesting operations. The first egg appears about May 25 and incubation begins a week later. To be exact, there is little attempt at building a nest, for the eggs, two or three large white ones, are laid within a slightly raised rim of sand and pebbles. knobs on the bills of both sexes are at their prime in late May, but by the middle of June they begin to fall, and before the end of the month all are shed. At the same time the color of bill and pouch and the bare skin about the eyes loses the red tinge of the breeding season, and remains yellow until the following May brings its seasonal change again. The white nuchal crest of the breeding season is also at its prime in May, but is lost some ten days later than the billknobs, and replaced by gray on the crown and nape.

Both sexes share in the incubation duties, nest relief taking place near noon each day, and, I have reason to believe, again at midnight. The extreme similarity of the sexes prevents me from knowing whether the incoming birds at noon are males, or even if there is any regularity at all. But I do know that this change affords each day a fine opportunity to observe the wonderful flight of pelicans in large flocks. Often they mount high in air and perform maneuvers marvellous in a bird so large and apparently so clumsy (when seen in our zoo's). Acquaintance with them in their native haunts shows them to be as strong and graceful as their great spread of wing should indicate. I believe that flocks follow the leadership of a wise old female pelican if any of that sex

are present, otherwise the most sagacious male.

When newly hatched, pelicans are helpless little creatures, naked, blind, and too weak even to move about in the hollow that is their home. In two weeks their ruddy little bodies have become more or less covered with white down, and they are able to move about. The parents are devoted to the nestlings, shielding them from the hot sun, feeding them on regurgitated fish, and leaving them with extreme reluctance. But later, the parents leave when one comes within three hundred yards, and crowd toward the far side of the island. Then, on still closer approach, all take wing, the nesting birds flying only a few hundred feet before alighting on the water, the non-breeding birds (usually a hundred or more) departing to distant parts of the lake. If the young are large enough to walk, they follow the older birds to the edge of the island and swim out to the parents. After the intruder leaves, the birds return to their

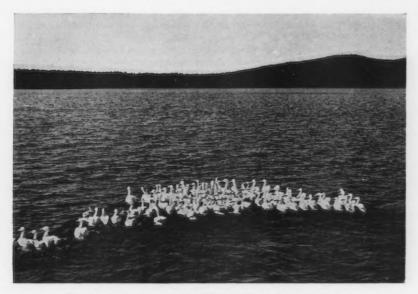


Fig. 56. Drove of young White Pelicans on Yellowstone Lake

homes. How the parents ever distinguish their own youngsters is a mystery to me, but I have seen an old bird return with fish and refuse to open his bill to youngster after youngster until he came to his own. Then he would open his pouch wide and the little fellow would thrust in his head and neck until he threatened to disappear entirely, and prod around for his fish. Usually only one bird at a time is fed. Possibly only one bird in a brood reaches maturity, for I have often noted a great discrepancy between the numbers of eggs laid and the young birds maturing. One season I counted over five hundred eggs, yet there were only one hundred and seventy young to be found in mid-August. What became of the others I could not tell, but I have never found any dead pelicans of any age except those killed on the mainland by coyotes, and a few young birds killed by exposure to the sun. Perhaps the gulls have developed

an inordinate appetite for pelican eggs. Young pelicans grow fast, and while they cannot fly for two months, they can swim expertly at a much earlier period. If it were not for the gulls, Molly Island would be a rather solemn and quiet nesting ground, for the old pelicans never make a sound and even the

young have only a low grunt.

The White Pelican gets his prey by scooping up fish as he swims along; often a school is driven before him into a sheltered cove where a sudden rush and a violent plunge secures a pouch full. A White Pelican is said never to dive, yet on at least one occasion while riding along the shore of the Yellowstone River I saw one do that very thing. He did not drop from the air with a mighty splash as a Brown Pelican would have done, but plunged forward and down from the river surface after the manner of a grebe. He went clear under the surface, but I could not say whether or not he caught his fish. This bird does not use his pouch to hold fish in, but gulps them down as fast as caught; still the pouch does serve to strain the fish from the water. Sometimes I have seen a pelican rob a fish-duck when that bird incautiously fished too near.

This Yellowstone colony bids fair, under government protection, to maintain its size indefinitely. While the mortality is high among the young birds, enough reach maturity to a little better than maintain the number. Pelicans are hardy birds, and their greatest danger is from the encroachments of civilization. Here on Molly Island they seem to be secure, for they are too far from the regular tourist route to be molested often. Almost all of the pelicans are infested with a tapeworn (Dibothrium cordiceps) in the intestinal tract. Here the parasite lives and discharges its eggs out into the waters of the lake to be eaten by the trout, who become the unwitting hosts of the worms in their larval, or intermediate stage. And of course the consumption of the trout by the pelicans completes the circle and permits the larvae to develop. However, these parasites do not destroy the pelican nor even affect his health to an appreciable extent.

A third bird that I have noted on Molly Island is the Caspian Tern (Sterna caspia). I have seen small flocks there twice, both times in late May, the birds with the black cap and the coral-red bill of the breeding season. But, unfortunately, I have never been able to determine positively that these terms nested

on the islets, although I believe they do.

Summerville, South Carolina, March 31, 1917.

A NEW SUBSPECIES OF GEOTHLYPIS BELDINGI

By HARRY C. OBERHOLSER

THE Belding Yellow-throat, Geathlypis beldingi Ridgway, is a rather uncommon bird in collections. Occurring, as it does, only in the southern portion of the peninsula of Lower California, its development into two subspecies would seem hardly probable, but such is now seen evidently to be the case. During the course of the identification of specimens of Geothlypis in the Biological Survey collection, the writer's attention was called to the very conspicuous differences between individuals of this species from the Cape San Lu-

cas region and those from the central portion of the Lower California peninsula. On further comparison the latter prove to represent a remarkable new subspecies, which I take pleasure in dedicating to Mr. Edward A. Goldman, who, with Mr. E. W. Nelson, collected the type series.

Geothlypis beldingi goldmani, subsp. nov.

Chars. Subsp.—Similar to Geothlypis beldingi beldingi, but male with the upper surface much duller, more brownish or grayish (less yellowish) throughout; erown behind the black mask largely or wholly grayish or whitish instead of yellow; yellow of under parts somewhat lighter and confined to throat and breast; lower abdomen white or whitish, instead of usually deep yellow, as in Geothlypis beldingi; sides and flanks paler and more grayish. Female similar to the female of Geothlypis beldingi, but upper parts and sides of head paler, more grayish (less yellowish); yellow of lower parts paler and less extensive, confined to throat and upper breast, the abdomen being dull whitish, slightly or not at all washed with yellow; sides and flanks paler, more grayish.

DESCRIPTION.—Type, adult male, no. 196026, U. S. Nat. Mus.; San Ignacio, Lower California, Mexico; October 7, 1905; E. W. Nelson and E. A. Goldman; original number, 11766. Sinciput, lores, ocular region, cheeks, auriculars, and a narrow line extending diagonally downward and backward to the sides of the throat, black, forming a conspicuous mask; behind this a narrow line of pale grayish mixed with whitish and a little lemon yellow, and on the postocular region with lemon chrome; occiput and cervix brownish olive, verging toward sepia, with a mixture of fine streaks of lemon yellowish, these most conspicuous on the occiput, and resulting from the largely yellow bases of the feathers, which are incompletely covered by the brownish tips; back and scapulars dull citrine, washed with brownish or grayish; rump similar but lighter and somewhat more grayish; upper tail-coverts of the same color as the back, but paler and of a clearer shade of citrine; tail dark citrine, the inner margins of the rectrices more brownish; wings dark hair brown, the quills and coverts edged with citrine; sides of neck posterior to the grayish band similar in color to the cervix, but less mixed with lemon yellow; anterior lower parts chrome yellow, paling to lemon chrome on the middle of the upper abdomen; lower abdomen dull yellowish white; under tail-coverts basally wax yellow, terminally between wax yellow and old gold; sides and flanks isabella color; thighs between tilleul buff and drab gray; edge of the wing lemon chrome; under wing-coverts dull grayish white, washed with lemon chrome.

Measurements.—Male: Wing, 61.5-65.5 (average, 63.5) mm.; tail, 64-70 (66); exposed culmen, 12.5-14.3 (13.5); tarsus, 23-25 (24); middle toe without claw, 15-17 (15.7).

Female: Wing, 59-63.5 (average, 60.6) mm.; tail, 60-65.5 (62.1); exposed culmen, 13-13.5 (13.2); tarsus, 21.5-23 (22.2); middle toe without elaw, 14-15.2 (14.4).

Geographic distribution.—Central Lower California, from San Ignacio to Comondu.

REMARKS.—This very distinct and unexpected subspecies is most readily distinguished from *Geothlypis beldingi beldingi* by the whitish crown band, the less yellowish upper parts, and whitish abdomen of the male; and the less yellowish upper surface, and paler, less extensive yellow of the lower parts in the female. Birds from San Ignacio, which represent the northern limit of its

Seven specimens, from San Ignacio and Comondu, Lower California. Three specimens, from San Ignacio and Comondu, Lower California.

range, are, as would be expected, most extreme in their characters. Two males and two females from Comondu, some distance south of San Ignacio, are intermediate between Geothlypis beldingi goldmani and Geothlypis beldingi beldingi, the females being more like the latter than are the males, which are but slightly different from Geothlypis beldingi goldmani. As a whole the Comondu birds are certainly referable to the northern race. The species has apparently not been found between Comondu and La Paz, Lower California, but Geothlypis beldingi beldingi probably ranges northward at least two-thirds of the way to Comondu.

The type of *Geothlypis beldingi* is an adult male without date, taken at San José del Cabo, in the Cape San Lucas region of Lower California. It is very richly colored above and below, and is similar to most of the series of the southern race examined; hence this name must apply to the Cape San Lucas form.

There is some individual variation in Geothlypis beldingi goldmani in the extent of the yellow on the lower parts; also of that on the crown: in two adult males there is no yellow to speak of on the crown behind the black mask; and these specimens, with their pale grayish or whitish crown bands, look very much like some forms of Geothlypis trichas, though their large size, more richly yellowish upper parts, and greater amount of concealed yellow on the occiput and on the whitish post-ocular region separate them at sight from all the forms of Geothlypis trichas.

The present new subspecies seems to be chiefly resident, inhabiting a restricted area in Lower California, as the only evidence of its occurrence in the Cape San Lucas region is an apparently immature female (No. 89807, U. S. Nat. Mus.), taken at San José del Cabo by Mr. L. Belding on January 21, 1883.

Detailed measurements, in millimeters, of the adult specimens examined in the present connection are given below.

1 Geothlypis beldingi Ridgway, Proc. U. S. Nat. Mus., v, September 11, 1882, p. 344.

MEASUREMENTS IN MILLIMETERS OF SPECIMENS OF Geothlypis belding i goldmani collected by e. w. nelson and e. a. goldman

U.S. Nat. Mus. No.	Sex	Locality		Date (1905)	Wing	Tail	Exposed	Tarsus	Middle toe without claw
1960261	8	San Ignacio, er Californ		Oct. 7	64.0	65.5	14.0	25.0	16.0
196028	8	66 66		6.6	61.5	64.0	12.5	23.5	15.5
196027	8	66 66		4.6	63.5	65.0	13.5	24.8	15.3
196030	8	46 66		Oct. 8	65.5	68.0	13.3	23.0	15.7
196031	8	66 66		6.5	63.5	66.0	14.3	23.5	15.0
196032	8	Comondu, L. California.	ower.	Nov. 8	65.0	70.0	13.0	25.0	17.0
196034	8	6.6	6.6	Nov. 9	62.0	64.0	13.5	23.8	16.0
196029	9	San Ignacio, er Californ		Oct. 7	59.5	60.0	13.2	23.0	15.2
196033	9	Comondu, L California	ower.	Nov. 8	63.5	65.5	13.0	21.5	14.0
196035	2	6.6	6.6	Nov. 9	59.0	61.0	13.5	22.3	14.0
1 T3	pe.								

Washington, D. C., Sept. 28, 1917.

FROM FIELD AND STUDY

Western Robin and Sierra Junco Nesting in Alameda County, California.—On May 15, 1917, while strolling through the Claremont Country Club grounds in Oakland a number of Cooper Club members became interested in the presence of Western Robins (Planesticus migratorius propinquus). Our interest was increased when we found a nest about twenty-five feet above the ground in a deciduous oak tree with the brooding Robin in full view. The same morning we came upon a nest of the Sierra Junco (Junco oreganus thurberi), containing four young partly feathered.

On May 18, I made a second visit to the same part of the grounds. The Robin was still brooding, but the Junco's nest had been pulled out of its snug hollow and was empty. Not far away I found Sierra Juncos trilling in the cypress trees.—Amelia S. Allen, Berkeley, California, September 4, 1917.

Sierra Junco Breeding at Berkeley.—On September 3, 1917, while walking along the road at the back of the Museum of Vertebrate Zoology building on the University of California campus, my attention was attracted by the insistent calling of Juncos (probably Junco oreganus thurberi). I discovered two streaked young on an oak limb about ten feet directly above my head, and at the same time I heard the call of another Junco higher up in the same tree. This last proved to be the female parent which flew to the road, followed by one young begging to be fed. It was given a worm by the parent, after which both continued feeding on the road within fifteen feet of me for about ten minutes. All this time the other young Junco remained in the tree calling. The parent then flew to this one and fed it several times with something from the limbs of the oak.—Margaret W. Wythe, Berkeley, California, September 6, 1917.

That Goshawk Invasion Again.—Apparently the first record of the Eastern Goshawk (Astur atricapillus atricapillus) for Los Angeles County was made by Dr. I. D. Nokes, of Los Angeles, who took an adult female of this variety November 26, 1916, in Placerita Canyon, near Newhall.—L. E. WYMAN, Los Angeles, August 24, 1917.

The Goshawk in Southern California and Arizona.—Apparently there was a general flight of this species last winter through the southern counties of California, and even extending to Arizona points.

According to my records, I received four specimens in the flesh, one of which was shot at Walker, Arizona, December 10, 1916, by Mrs. A. F. Carlson, who writes me that she also "saw its mate". The other three specimens, all females, were taken in the vicinity of Los Angeles, as follows: November 24, 1916, Chatsworth; December 18, 1916, Malibu district; December 27, 1916, Whittier.

Mr. Roth Reynolds, taxidermist, reports one bird taken in Arizona, close to the California line, but has no exact data. Mr. Andy Booth received two specimens, one of which I purchased and later donated to the Museum of History, Science and Art. I also saw three mounted specimens which had been recently prepared in the taxidermy shop of Mr. Melvin Phillips, Fillmore, California. He reports that all of them were killed in Ventura County and that several others were taken during the winter months.

I personally dissected the four specimens I received, and ascertained that three of the stomachs contained undigested parts of Valley Quail, the other being empty.—A. E. Colburn, Los Angeles, California, September 15, 1917.

Some Field Notes for 1917 .-

Elanus leucurus. White-tailed Kite. During the spring and summer of 1917 a pair of White-tailed Kites nested near Lake Merced and succeeded in bringing their brood to maturity. This is the first record in many years for San Francisco County. I noted these birds on several occasions in Marin County during June, and found one nest near Kentfield on June 5. It is my opinion that the species is slowly but surely re-establishing itself in the bay region where it has been nearly extinct for several years.

Oceanodroma kaedingi. Kaeding Petrel. On May 7 I saw two petrels, evidently of this species, on San Francisco Bay, near the entrance to Oakland harbor. The presence of these birds of the open sea is rare enough with us to be worthy of note.

Sitta canadensis. Red-breasted Nuthatch. Ixobrychus exilis. Least Bittern. These two species were noted by me in Golden Gate Park on May 12. Both were reported to me by competent observers several times after I noted them, and it seems possible that they spent the summer there.

Planesticus migratorius propinquus. Western Robin. It is not very long ago that the first robin's nest was discovered in Golden Gate Park. This year the birds seemed to me to be more abundant than ever. They are also nesting in San Mateo County at Mount Olivet Cemetery, and on the eastern side of the bay near Berkeley. I noted them carrying food at the cemetery on July 15; and Mrs. Amelia S. Allen reports them from the Berkeley station.

Phalacrocorax auritus albociliatus. Farallon Cormorant.

Phalacrocorax penicillatus. Brandt Cormorant.

Mr. W. Leon Dawson some years ago reported Farallon Cormorants as nesting in large numbers on the Seal Rocks, where they seem never to have been noted previously. On July 15 I examined the birds on these rocks very carefully with a telescope magnifying twenty diameters. There were several hundred cormorants on the rocks and a good many of them were nesting. The nests could be plainly seen and birds were also seen carrying nesting material to the rocks. Dawson mentioned only Farallon Cormorants, but of those I examined about a third were Brandt Cormorants.

Amphispiza belli, Bell Sparrow. On June 2 I found a pair of Bell Sparrows nesting on the east slope of Mount Tamalpais, west of Larkspur. There were several young just leaving the nest and hardig able to fly. The species has been noted in the

county near Nicasio but is apparently nowhere very common.

Hylocichla guttata slevini. Monterey Hermit Thrush. On June 10 I noted a few Monterey Hermit Thrushes on the eastern slope of Bolinas Ridge. The locality is rather dense forest, and in condition approaches Boreal. The time of year and the surroundings are such as strongly to suggest that these thrushes, with so disconnected a breeding range, have one of their nesting colonies in western Marin County.

Circus hudsonius. Marsh Hawk. In July, 1915, I noted a number of Marsh Hawks on Point Reyes Peninsula and suspected that they were nesting there as some of the birds seen seemed to be in juvenile plumage. On June 20 of the present year I found a nest about two miles from Point Reyes Light House. The nest was composed of grass and contained five eggs rather advanced in incubation. I believe that this is the first breeding record for Marin County and for the whole humid coast region .-- W. A. Squires, San Francisco, California, September 15, 1917.

Condition of Game Birds in East-central California. - During two months of the past (1917) summer, and six weeks of the same season in 1914, I was engaged in field work at various points in western Mono County. As last winter was a hard one for all forms of mountain life because of the severe and long-continued cold, and as there are now many more hunters in the district each fall than there were three years ago, it seems to be worth while to report upon the apparent condition of the game birds of the district.

Most of my time during both years was spent at points between eight and nine thousand feet in altitude, which was an excellent location for both quail (Oreortyx p. plumifera) and grouse (Dendragapus o. sierrae). In 1914, both species were well represented, and although by no means common, especially the latter, both were apt to be encountered during a walk of a couple of miles through their haunts. In 1917, throughout a greater length of time, and during rambles that were of considerably greater extent, I saw neither quail nor grouse; nor did anyone who was camped in our near vicinity, except my brother-in-law, who met a small family of grouse one day. This present scarcity I believe to be due more to the severe winter than to human agencies, for both birds make decidedly hard hunting. Although most of the published information pertaining to the Sierra Grouse gives one the impression that these birds haunt the pines and associations of scant undergrowth, my experience has been that they seldom resort to the larger conifers except to roost, and to escape their enemies by remaining motionless in the upper branches. At least in the locality under consideration, their favorite habitat is in the vicinity of dense aspen thickets, and the tangles of manzanita, hazel and other brush on the dry hillsides and benches of the high Transition Zone, from which they flush to the timbered ravines. Such is the favorite haunt of the quail as well. Even with hunters

fairly plentiful, it would be no trouble for these birds to hold their own, for there are few men whom a few hundred feet of this manzanita tangle will not discourage. Over the Sierran divide to the west, conditions are somewhat different, for the hillsides are practically all densely wooded, and although grouse (but not quail, apparently) occur in satisfactory numbers in the vicinity of the lower aspen thickets, their numbers are likely to be reduced seriously only in the vicinity of the main automobile roads, which are few and far between.

In the foothills of western Owens Valley, Plumed Quail, with quantities of Valley Quail (Lophortyx c. vallicola) at a slightly lower elevation, are more abundant than they are in middle Mono County, but in the vast stretches of brush they have a safe retreat and are well able to take care of themselves.

Pheasants (*Phasianus torquatus*) have been introduced into the upper part of Owens Valley, and are often to be seen feeding familiarly beside the roads. The area suited to them is the cultivated strip along the lower slopes, and here they have been quite firmly established for a number of years. They are holding their own, and even increasing, I am told, but the suitable territory is so limited that if the birds are ever allowed to be shot, their extermination would be speedy, and, I am convinced, they could not survive open seasons for two years.

The Sage Hen (Centrocercus urophasianus), which now occurs and breeds regularly as far south as the vicinity of Big Pine, is confined to the sage brush at the bottoms of the valleys. In such locations they prove to be easy prey to hunters, and their complete protection comes none too soon, for their numbers are decreasing annually. The favorite method of hunting them is to track them over the dry sand through the brush, or, in late fall, through the snow. Not only do local ranchers account for many, and will do so still, probably, in spite of the law, but up to the present year, numbers of so-called sportsmen who went from the larger cities for the purpose, hired men to locate flocks of the birds and drive them towards the hunters. I fear that the good roads movement in the west will prove to be an effective extinctive agency for this grand game, unless prompt and stringent measures are adopted by all the states interested in its perpetuation.—A. B. Howell, Covina, California, October 8, 1917.

Two New Records for the State of Washington.—It gives me great pleasure to record the two following species, which are, to the best of my belief, new to the state of Washington. Both captures were made by Mr. Carl Lien at Westport, Washington. The quoted information following was supplied by Mr. Lien.

Sterna caspia. Caspian Tern. "On October 5, 1917, on the mudflats, I ran across a Caspian Tern that someone had shot, and a young man who was with me said, 'I saw eight or ten of those birds flying around here yesterday'. I could not save the skin, as a hawk or something else had torn it too badly." Mr. Lien did, however, get one of the wings in order to have a proof of the record, and Mr. J. Grinnell has kindly examined it and endorsed the record.

Tryngites subruficollis. Buff-breasted Sandpiper. "I had to cross a salt marsh, or grass-covered tide-flat, and towards the upper end where the marsh edges off into the sand, two of these quiet and confiding birds were to be seen. This was on September 1, 1917, and on September 2, I saw them again." The next day, September 3, Mr. Lien returned and collected both birds, which were male and female. This was at Westport, Chehalis County, which borders on the Pacific Ocean. This species is so extremely rare on the Pacific coast that Mr. Lien's notes are of interest as showing in what sort of locality other observers should look for it.—J. H. Bowles, Tacoma, Washington, October 29, 1917.

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EDITORIAL NOTES AND NEWS

The editors of THE CONDOR are again indebted to Mr. J. R. Pemberton, this time for the annual index which concludes the present issue. Mr. Pemberton has further volunteered to tackle the second ten-year index to THE CONDOR, which will be in order for preparation after the end of 1918. In this connection the editors will welcome suggestions or expressions of opinion as to style and degree of comprehensiveness of the next index. Shall it conform closely to the style set by the first?

During the past several years Mr. Leverett M. Loomis has been working almost continuously on the extensive collections of tubinarine birds in the California Academy As a result he has now pracof Sciences. tically completed a monograph of the group as existing throughout the world. This is to be published at once by the Academy, and its appearance may be confidently expected to throw much new light on the relationships of the American species.

We learn through Mr. Alexander Wetmore that the manuscript for Volume VIII of Ridgway's Birds of North and Middle America is

now ready for the press. This volume includes the gulls and shore-birds, and will be welcomed as the first systematic revision of these groups for many years.

Mr. Rollo H. Beck has returned to New York from his five-year term of field collecting in South America. He secured in all about 8000 bird skins, which have been added to the Brewster-Sanford collections in the American Museum of Natural History.

In the death of Evan Davis, who joined the Cooper Ornithological Club in 1894, the Club loses one of its oldest members, and the community in which he lived loses a highly respected citizen. Mr. Davis was always a student and lover of birds. He owned a considerable collection of eggs, but his oological activity was limited by conscientious scruples against collecting on Sunday. He was a member of numerous fraternal orders, and for many years had been a prominent church worker. In recognition of his sterling qualities, the Cooper Ornithological Club has passed resolutions deploring the death of Mr. Davis as that of an earnest student and true gentleman, whose place cannot be easily filled.

The California Museum of Vertebrate Zoology has conducted field surveys this year in Inyo and Mono counties, extreme eastern California. As usual the birds have received a large share of attention, and much new information has been accumulated in regard to mode of occurrence and life habits. Cooper Club members who participated in this work are: Joseph Dixon, Alfred C. Shelton, J. Grinnell, Halsted G. White and Tracy I. Storer.

Mr. J. G. Tyler, author of Avifauna Number 9, Some Birds of the Fresno District, California, has enlarged his field of study to take in the whole San Joaquin Valley. He is now working towards a fairly exhaustive treatise upon the "Birds of the San Joaquin Valley" intended ultimately to be published in book form. Regional studies of this nature are going far towards making knowledge of birds a widely popular posses-

MINUTES OF COOPER CLUB MEETINGS

NORTHERN DIVISION

August.-The regular meeting of the Northern Division of the Cooper Ornithological Club was held at the Museum of Vertebrate Zoology on August 16, at 8 P. M. President Evermann was in the chair, and the following members and friends were present: Messrs. Carriger, Grinnell, De Groot, Lastreto, Squires and Swarth; Mesdames Allen, Culver, Ferguson, Grinnell, Kelley, Kibbe, Meade, Schlesinger, Swarth and Wythe; visitors: Miss Beatty, Mr. Kibbe, Mrs. Rusk, Mrs. Walker, Mr. Meade and Mr. and Mrs. Smythe.

The minutes of the July meeting were read and approved, and Miss Edna Billings was elected to membership. Three proposals for membership were Augustus S. Kibbe, 1534 Grove St., Berkeley, Cal., proposed by H. S. Swarth; Mr. and Mrs. W. H. Smythe, Fernwald, head of Dwight Way, Berkeley, proposed by Miss Susan B. Culver.

Posters sent out by the Audubon Association were exhibited by Mr. Grinnell. Various vacation experiences were then related. Mr. Kibbe gave a report of the trip taken by the Pacific Association of Audubon Societies to the Farallon Islands. This was followed by a discussion of possible ways of protecting migrating birds as they fly about lighthouses. Dr. Evermann and Mr. Carriger spoke of the changed conditions at the Farallons in recent years. Miss Wythe gave an account of birds observed during a camping trip in Plumas County, and Mr. Squires reported interesting finds in Marin County during the nesting season. Adjourned .-AMELIA S. ALLEN, Secretary.

SEPTEMBER .- The regular meeting of the Northern Division of the Cooper Ornithological Club was held at the Museum of Vertebrate Zoology, Berkeley, on Thursday evening, September 20, at eight o'clock. Dr. Evermann was in the chair, and the following members were present: Messrs. Bryant. Carriger, Davis, Evermann, Kibbe, Smythe, Swarth, Wheeler, Wiley and Wright; Mesdames Allen, Culver, Ferguson, Grant, Kibbe, Kluegel, Lueddemann, Meade, Schlesinger, Swarth and Wythe. The visitors present were Messrs. Martens, Meade, Schlesinger and Smith; Mesdames Evermann, Ferguson, Griffith, Leggett and Wheeler.

The minutes of the August meeting of the Northern Division were read and approved. The July minutes of the Southern Division were then read, after which, on motion of Dr. Bryant, Mr. Augustus S. Kibbe and Mr. and Mrs. W. H. Smythe were elected to membership. Mr. Carl Lien, Destruction Island, Astoria, Oregon, was proposed for membership by Wharton Huber of the Southern Division.

The vacancy on the executive committee of the California Associated Societies for the Conservation of Wild Life, caused by the resignation of Tracy I. Storer, was filled by the election of Rev. W. A. Squires to that position.

Business having been disposed of, the

Club listened to Mr. Swarth's interesting description of the "Apache Trail" in central Arizona, illustrated by beautiful colored slides, which had been loaned for the occasion by the Southern Pacific Railroad. Adjourned.—Amelia S. Allen, Secretary.

SOUTHERN DIVISION

August.—Regular monthly meeting of the Southern Division, Cooper Ornithological Club, was held at the Museum of History, Science and Art, August 30, 1917. Vice-President Law officiated, with the following members present: Messrs. Colburn, Cookman, Daggett, Hannaford, Holland, Little, Nokes, Reis, Rich, Shepardson, Wyman; Mrs. Law and Miss Germain. Miss Crew and Mr. Stormont were visitors.

Minutes of the July meeting were read and approved. An electing ballot was cast for Carl Lien, Astoria, Oregon. New names presented were: Capt. P. H. Gosse, R. A. M. C., no. 10, C. C. S., 2nd Army, Br. Expeditionary Force, France (permanent address, Saville Club, London), proposed by Capt. Allan Brooks; and Frank A. Leach, 217 Hillside Ave., Pledmont, Calif., by W. Lee Chambers

There being no other business matters for consideration, the members listened to an account, by Mr. Cookman, of an expedition to the Coronados Islands, in which he and two others participated. Several trays of skins of Gallinaceous birds were then inspected and discussed. Adjourned.—L. E. Wyman, Secretary.

SEPTEMBER.—Regular monthly meeting of the Southern Division, Cooper Ornithological Club, was held at the Museum of History, Science and Art, September 27, 1917. Members present were: Messrs. Brown, Cox, Daggett, Fisher, Holland, Hannaford, Law, Little, Miller, Nokes, Reis, Willett and Wyman; Mrs. Law and Miss Little. Visitors were Mr. Harter and Mrs. Young.

Minutes of the July meeting of the North-August meeting. Miss Little presented the name of Pauline Rodgers Young, Canille, Santa Cruz Co., Ariz., for membership.

The members then listened to a most interesting talk by Dr. Fisher concerning the experiences of the Death Valley Expedition, of which he was a member, as were also Dr. C. H. Merriam, Mr. Vernon Bailey, and the late General Funston. Dr. Fisher retraced the route of the expedition and related in detail many of the incidents that gave it importance biologically, and others that added the element of human interest. Adjourned. L. E. WYMAN, Secretary.

INDEX TO VOLUME XIX

A

Acanthis linaria linaria, 129
Accipiter cooperi, 34, 135, 173
velox, 16, 32, 135
Actitis macularia, 16, 32, 134
Aechmophorus occidentalis, 133
Aegialitis semipalmata, 25
Aepyornis maximus, 171
Aeronautes melanoleucus, 3, 163, 169
Agelaius phoeniceus californicus, 60
phoeniceus fortis, 39
phoeniceus neutralis, 137
Aimophila rufficeps rufficeps, 130

ruficeps scotti, 163
Albatross, Black-footed, 167

Allen, Amelia S., western robin and Sierra junco nesting in Alameda County, California, 185

Aluco pratincola, 59 Ammodramus savannarum bimaculatus, 24 Amphispiza belli, 186

nevadensis nevadensis, 39, 138, 142 Anas platyrhynchos, 30, 59, 133, 141, 143 Anthus rubescens, 139

Anthus rubescens, 135
Aphelocoma californica californica, 25, 60,
94, 95

californica cyanotis, 95 californica grisea, 95

californica hypoleuca, 95 californica immanis, 94, 95

californica immanis, 94, 9 californica obscura, 95

californica sumichrasti, 95 californica texana, 95

californica texana, 95 californica woodhouseii, 95

cyanea, 95 cyanotis, 94 floridana, 95

grisea, 94 hypoleuca, 94

insularis, 95 sumichrasti, 94

texana, 94, 163 woodhouseii, 94, 163

Aphriza virgata, 101

Apteryx, 89 Aquila chrysaetos, 34, 162

Aquila chrysaetos, 34, 162 Archibuteo lagopus sancti-johannis, 135

Ardea herodias herodias, 32, 134

Arenaria melanocephala, 16 Arquatella maritima couesi, 16 Asio flammeus, 35, 136

wilsonianus, 34, 135, 142 Astragalinus lawrencei, 60 psaltria hesperophilus, 60 psaltria mexicanus, 163

psaltria psaltria, 163

tristis pallidus, 39, 138 tristis salicamans, 60

Astur atricapillus atricapillus, 70, 127, 185 atricapillus striatulus, 70, 103, 127

Asyndesmus lewisi, 136 Auklet, Cassin, 58

Avocet, American, 32, 101, 134, 156

В

Baeolophus atricristatus atricristatus, 164 inornatus inornatus, 61

Eailey, Florence Merriam, birds of the humid coast, I, fishermen, 8; II, visit from a sooty grouse, 11; III, the center of a compressed nesting area, 46; IV, up the old wood road, 51; V, by the sign of the spruce stub, 53; VI, in the bracken, 95; VII, the band-tails, 98; VIII, a voice from the heights, 101; red letter days in southern Callforna, 155

Baldpate, 30, 85, 142 Bartramia longicauda, 162 Bittern, American, 57, 134

Least, 186 Blackbird, Bicolored, 60 Brewer, 37, 39, 60, 62, 133, 137

Rusty, 173
San Diego Red-wing, 156
Vollow booded, 27, 127, 156, 176

Yellow-headed, 37, 137, 156, 176 Bluebird, Mountain, 43, 140, 152

San Pedro, 169 Western, 53, 57, 133, 140

Bob-white, 128 Bombycilla cedrorum, 41 garrula, 103, 128, 141

Bonasa umbellus sabini, 168 umbellus togata, 32 Botaurus lentiginosus, 134

Bowles, J. H., the Baird sandpiper in the state of Washington, 25; the arctic horned owl in the state of Washington, 70; the winter migration of 1916-1917 in the north-west, 125; two new records for the state of Washington, 187

Bradbury, W. C., notes on the black-crowned night heron near Denver, 142; notes on the nesting of the Clarke nutcracker in Colorado, 149

Branta canadensis canadensis, 134 canadensis occidentalis, 16

Bryant, H. C., stomach contents of an Oregon ruffed grouse, 168; review of C. A. Wood's "the fundus oculi of birds especially as viewed by the ophthalmoscope," 174

Bubo virginianus algistus, 127 virginianus pallescens, 35, 126 virginianus saturatus, 125 virginianus subarcticus, 35, 70, 125

Bunting, Indigo, 171 Lazuli, 41, 61, 139

Burnett, W. L., two albino English sparrows, 69

Bush-tit, California, 150 Coast, 61 Lead-colored, 103, 165 Lloyd, 26, 165

Buteo abbreviatus, 103 borealis alascensis, 16 borealis calurus, 34, 59, 135, 162 lineatus elegans, 129 swainsoni, 34, 135

C

Calypte anna, 60, 160, 161, 168 Canvas-back, 85, 87

Carpenter, N. K., western belted kingfisher breeding in San Diego county, California, 22

Carpodacus cassini, 138 mexicanus clementis, 173 mexicanus frontalis, 60, 138, 166 purpureus californicus, 60

Catbird, 41
Cathartes aura septentrionalis, 32, 135
Catherpes mexicanus punctulatus, 130, 140

Catheturus lathami, 88 Catoptrophorus semipalmatus inornatus, 134 Centrocercus urophasianus, 32, 135, 187

Cepphus columba, 58, 71 Certhia familiaris occidentalis, 140, 143 Ceryle alcyon, 35, 136

alcyon caurina, 22, 60 Chaetura vauxi, 136

Chambers, W. Lee, early nesting of the San Diego song sparrow, 102

Chat, Long-tailed, 41, 139, 164 Chickadee, Chestnut-backed, 50

Long-tailed, 41, 140 Mountain, 41, 103, 133, 140, 164 Santa Cruz, 61

Chicken, Barred Plymouth Rock, 125 Prairie, 135

White Leghorn, 125 Chondestes grammacus strigatus, 138 Chordeiles virginianus henryi, 36

virginianus hesperis, 169 Cinclus mexicanus unicolor, 41, 139, 169 Circus hudsonius, 32, 186

Clay, C. I., notes on the California jay in Humboldt county, 25; a new record for California, 68; Del Norte county bird notes, 71

Coccothraustes vespertina montana, 21 vespertinus mexicanus, 22

Coccyzus americanus californicus, 162 Colaptes cafer collaris, 36, 60, 136 Colburn, A. E., the goshawk in southern California and Arizona, 185 Columba fasciata fasciata, 162

Columba fasciata fasciata, 162 Colymbus auritus, 15, 30

holboelli, 15

Condor, California, 159, 176

Cooper Ornithological Club, directory of members, 107; minutes of, 26, 74, 105, 147, 175, 189

Coot, American, 32, 59, 65, 85, 134, 156

Cormorant, Baird, 59, 71 Brandt, 59, 186

Farallon, 58, 186

Corvus brachyrhynchos hesperis, 37, 137 corax principalis, 17

cryptoleucus, 163

Cowbird, 37, 38, 39, 137 Crandall, Lee S., review of his "pets, their

care and history", 146 Crane, Sandhill, 44, 48, 134

Creeper, California, 140, 143
California Brown, 52

Crossbill, 133, 138 Sitka, 17

Crow, American, 92, 135, 152 Western, 37, 57, 137, 143

Cryptoglaux acadica acadica, 35

Cuckoo, California, 162 Curlew, Black, 157

Cyanocephalus cyanocephalus, 137 Cyanocitta stelleri annectens, 37, 137

stelleri carbonacea, 137 stelleri diademata, 163 stelleri frontalis, 169

Cyrtonyx montezumae mearnsi, 162

D

Dafila acuta, 16, 85

Dendragapus obscurus fuliginosus, 135 obscurus richardsoni, 32

obscurus sierrae, 186

Dendroica aestiva aestiva, 41 aestiva brewsteri, 61, 139, 169 aestiva sonorana, 164

auduboni auduboni, 41, 139, 143

coronata hooveri, 142 nigrescens, 139

townsendi, 139, 164
Dice, Lee R., habits of the magpie in southwestern Washington, 121

Dickeissel, 164 Dinosaurs, 90

Diomedea nigripes, 167

Dipper, American, 41, 133, 169

Dixon, Joseph, the home of the Baird sand piper, 77

Dove, Mourning, 22, 32

Western Mourning, 59, 135, 176
Dryobates pubescens homorus, 35
scalaris symplectus, 162
villosus monticola, 35, 136
villosus picoides, 17
villosus sitkensis, 17
Duck, Lesser Scaup, 59
Ruddy, 59
Scaup, 141
Dumetella carolinensis, 41
Dunlin, 83

E

Eagle, Bald, 49, 135
Golden, 34, 91, 162
Editorial notes and news, 26, 72, 104, 144, 171, 188
Elanus leucurus, 170, 185
Empidonax difficilis difficilis, 60, 169
griseus, 137
minimus, 163
trailli trailli, 137
wrighti, 163
Ereunetes mauri, 32
Erismatura jamaicensis, 59
Esterly, C. O., how does the shrike carry its prey? 25

E

Euphagus carolinus, 173

cyanocephalus, 36, 60, 137

Falco mexicanus, 135, 162 peregrinus anatum, 16 peregrinus pealei, 16 sparverius phalaena, 34, 135 sparverius sparverius, 59 Falcon, Peale, 16 Prairie, 135, 162 Finch, California Purple, 46, 52, 60, 99 Cassin Purple, 39, 138 Hepburn Rosy, 175 House, 138, 166 Flicker, 36 Red-shafted, 60, 98, 136, 158 Flycatcher, Ash-throated, 136, 158 Gray, 133, 137 Least, 163 Olive-sided, 9, 36, 46, 58, 60, 101, 170 Traill. 137 Vermilion, 25, 102

Western, 52, 60, 97, 169

Wright, 163
Forbush, Edward Howe, review of his recent publications, 145
Fulica americana, 32, 59, 65, 85, 134

Fulmars, 9

G

Gadwall, 156, 157, 158 Gallinago delicata, 32, 134 Gallinula galeata, 23 Gallinule, Florida, 22 Purple, 54 Gavia immer, 30 pacifica, 15 stellata, 15 Geococcyx californianus, 23, 160, 162 Geothlypis beldingi, 182 beldingi goldmani, 183 trichas occidentalis, 139 trichas sinuosa, 61 Gifford, H., a communication, 73 Glaucidium gnoma gnoma, 35 Gnatcatcher, Black-tailed, 156 Godwit, Marbled, 156 Golden-eye, 126 Goldfinch, Arkansas, 163 Green-backed, 60, 158 Lawrence, 60 Pale, 138 Western, 39 Willow, 60, 96 Goose, Canada, 134 Hutchins, 126 Tule, 105, 106 White-cheeked, 16 White-fronted, 105 Goshawk, Eastern, 70, 127, 185

Western, 70, 103, 127 Grebe, Eared, 57 Holboell, 15 Horned, 15, 30 Pied-billed, 24, 58, 138, 158 Western, 24, 56, 133

Grey, Henry, vermilion flycatcher at San Diego, California, 102; zone-tailed hawk at San Diego, California, 103

Grinnell, H. W., review of L. S. Crandall's "pets, their history and care", 146

Grinnell, Joseph, the sub-species of Hesperiphona vespertina, 17; a diagram for illustrating the seasonal shifting of the bird calendar, 68; an invasion of California by the eastern goshawk, 70; review of "second annual report of bird counts in the United States", 73; review of A. C. Shelton's "a distributional list of the land birds of west central Oregon", 174

Grinnell, J., and Storer, T. I., a new race of fox sparrow from the vicinity of Mono lake, California, 165

Grosbeak, Alaska Pine, 175
Black-headed, 41, 52, 98
British Columbia Evening, 20
California Black-headed, 158
California Evening, 20
Eastern Evening, 19
Evening, 17
Mexican Evening, 20

Pacific Black-headed, 61
Rocky Mountain Evening, 21
Rocky Mountain Pine, 39
Rose-breasted, 171
Western Blue, 73, 164
Western Evening, 137
Grouse, Canada Ruffed, 32, 33
Columbian Sharp-tailed, 32, 135
Oregon Ruffed, 12, 168
Richardson, 32
Sage, 32, 38

Sooty, 9, 11, 135 Guillemot, Pigeon, 58, 62, 71 Guiraca caerulea lazula, 164 Gull, California, 133, 177 Ringshilled, 177

Ring-billed, 177 Sabine, 16

Western, 9, 58, 71, 133

H

Haematopus bachmani, 71
Hallaeetus leucocephalus, 135
Hanford, Forrest S., the Townsend solitaire, 13

Hanna, Wilson C., further notes on the white-throated swifts of Slover mountain. 3

Hansen, Harold E., the Florida gallinule in San Francisco county, California, 22 Hansen, Harold E., and Squires, Walter E.,

a list of the birds breeding in San Francisco county, California, 54

Hawk, American Sparrow, 59

Cooper, 33, 135, 148 Desert Sparrow, 34, 133, 135 Duck. 22

Harris, 142 Marsh, 32, 103, 186 Red-bellied, 129

Rough-legged, 135 Sharp-shinned, 16, 32, 135, 148

Sparrow, 98 Swainson, 34, 135

Red-tailed, 148

Western red-tail, 59, 132

Zone-tailed, 103 Hedymeles ludovicianus, 171

Helodromas solitarius cinnamomeus, 162 Hen, Sage, 187

Henderson, Junius, the Bohemian waxwing in Colorado, 141

Henshaw, F. W., game bird conditions in Sutter county, California, 24

Heron, Anthony Green, 57, 156 Black-crowned Night, 57, 135, 142, 156, 159, 176

Great Blue, 10, 32, 57, 134, 157

Hesperiphona vespertina, 17 vespertina brooksi, 19, 20 vespertina californica, 19, 20 vespertina mexicana, 22 vespertina montana, 18, 20, 22, 137

vespertina vespertina, 19, 20 vespertina warreni, 21

Heteractitis incanus, 16, 71 Hirundo erythrogaster, 41, 61, 139

Holland, Harold M., the valley quail occupying nests of the roadrunner, 23

Howell, A. B., review of his "birds of the islands off the coast of southern California", 172; condition of game birds in east-central California, 186

Hummingbird, Allen, 73 Anna, 60, 160 Broad-tailed, 36

Calliope, 136, 142, 169 Rufous, 9, 47, 52, 96, 98, 136, 163

Hydrochelidon nigra surnamensis, 133 Hylocichla fuscescens salicicola, 43

guttata auduboni, 43, 165 guttata guttata, 140 guttata slevini, 186 ustulata ustulata, 61, 142

1

Ibis, Scarlet, 46
White-faced Glossy, 156, 157
Icteria virens longicauda, 41, 139, 164
Icterus bullocki, 39, 137
Ixobrychus exilis, 186
Ixoreus naevius meruloides, 130
naevius naevius, 140

J

Jaeger, Parasitic, 81
Pomarine, 81
Jay, Black-headed, 33, 37, 137
Blue-eared, 94
Blue-fronted, 169
California, 25, 60, 104
Coast, 52, 137
Crested, 9
Long-crested, 163
Pinyon, 137, 150, 152

Texas, 163
Woodhouse, 163
Junco, Intermediate, 39

Pink-sided, 39 Point Pinos, 60 Shufeldt, 133, 138 Sierra, 60, 185 Slate-colored, 138

Thurber, 169
Junco hyemalis connectens, 39
hyemalis hyemalis, 138
hyemalis mearnst, 39
hyemalis shufeldti, 138
hyemalis thurberi, 169

oreganus pinosus, 60 oreganus thurberi, 60, 185

K

Kennedy, C. H., some factors involved in the nesting habit of birds, 87
Killdeer, 32, 59, 134, 143, 158
Kingbird, Cassin, 158, 163
Eastern, 136
Western, 36, 58, 133, 136, 170
Kingfisher, Belted, 9, 35, 91, 136, 148, 162
Western Belted, 22, 60
Kinglet, Ruby-crowned, 33, 42, 140
Western Golden-crowned, 42, 47, 50
Kitchin, E. A., the black-footed albatross off

L

the coast of Washington, 167

Kite, White-tailed, 170, 185

Ladd, N. M., review of his "how to make friends with birds", 144 Lanius ludovicianus excubitorides, 41, 139 ludovicianus gambeli, 25, 61 Lanivireo solitarius cassini, 41, 139, 164 Lark, California Horned, 60, 156, 169 Desert Horned, 36, 137, 163 Dusky Horned, 133 Larus californicus, 133, 177 delawarensis, 177 occidentalis, 58, 71, 133 Law, J. E., notes on the Arizona spotted owl, 69 Linaria cyanea, 171 Linnet, California, 60 Lobipes lobatus, 32 Longspur, 79 Loon, Common, 30 Pacific, 15 Red-throated, 15 Lophodytes cucullatus, 68, 143 Lophortyx californica californica, 59, 135 californica vallicola, 23, 173, 187 Loxia curvirostra minor, 138 curvirostra sitkensis, 17 Lunda cirrhata, 58, 71

M

Mailliard, E. C., a portable nest, 166
Mailliard, Joseph, the hooded merganser in
Stanislaus county, California, 68;
concerning two forms of the Bryant
marsh sparrow in California, 69; review of A. B. Howell's "birds of the
islands off the coast of southern California", 172
Mallard, 24, 30, 59, 121, 125, 133, 141, 143,
157, 158

Mareca americana, 30, 85, 142 penelope, 142 Marila affinis, 59

Magpie, 37, 137, 143

Black-billed, 121

americana, 134
marila, 141
valisineria, 87
Meadowlark, Western, 39, 60, 126, 137, 155
Melanerpes formicivorus bairdi, 69, 103
Melospiza lincolni gracilis, 130
lincolni lincolni, 40, 130, 138
melodia caurina, 16
melodia merrilli, 138
melodia montana, 40
melodia pusillula, 61
melodia rufina, 16
melodia santaecrucis, 61
Merganser, 133
Hooded, 68, 143

Red-breasted, 16, 30
Mergus americanus, 133
serrator, 16, 30
Mimus polyglottos leucopterus, 164
Mitchell, H. H., peculiar nesting habits of
the avocet, 101
Mockingbird, Western, 158, 164
Molothrus ater ater, 37, 137
Murre, California, 58, 71, 172
Murrelet, Xantus, 173
Myadestes townsendi, 14
Myiarchus cinerascens cinerascens, 136
Myiochanes richardsoni richardsoni, 36, 136,
169

N

Nannus hiemalis pacificus, 140

Nettion carolinense, 30 Nighthawk, Pacific, 73, 169 Texas, 159 Western, 36 Nokes, I. D., western grebe breeding in southern California, 24; vermilion flycatcher near Los Angeles, 25 Nucifraga columbiana, 37, 137, 149, 163 Nutcracker, Clarke, 37, 133, 137, 149, 163 Nuthatch, Pigmy, 103, 133, 140 Red-breasted, 103, 140 Rocky Mountain, 103, 140, 164 Slender-billed, 140 Nuttallornis borealis, 36, 60, 170 Nyctea nyctea, 24, 127 Nycticorax nycticorax naevius, 134, 142

0

Oberholser, H. C., the number of species and subspecies of birds in Texas, 68; the status of Aphelocoma cyanotis and its allies, 94; a new subspecies of Geothlypis beldingi, 182 Oceanodroma furcata, 141

homochroa, 58 kaedingi, 58, 71, 185 Oidemia deglandi, 16 perspicillata, 16

Olor buccinator, 32 Oporornis tolmiei, 41, 139 Oreortyx picta picta, 134 picta plumifera, 169, 186 Oreoscoptes montanus, 41, 140, 143 Oreospiza chlorura, 41, 130 Oriole, Bullock, 39, 56, 133, 137, 176 Osprey, American, 34, 117, 135 Otocoris alpestris actia, 60, 169 alpestris leucolaema, 36, 163 alpestris merrilli, 137 Otus asio kennicotti, 16, 143 asio macfarlanei, 136 Ouzel, Water, 8, 13, 14 Owl, American Barn, 59, 155 Arctic Horned, 35, 70 Arizona Spotted, 69 Burrowing, 60, 133, 136, 158, 162 Coast Screech, 57 Dusky Horned, 57, 125 Great Grey, 175 Great Horned, 152 Kennicott Screech, 16, 126, 143 Long-eared, 34, 123, 135, 142 Macfarlane Screech, 136 Pigmy, 35 Saw-whet, 35 Screech, 50, 96 Short-eared, 35, 126, 136 Snowy, 24, 71, 127 Western Burrowing, 48 Western Horned, 35, 136 Oxyechus vociferus, 32, 134 vociferus vociferus, 59, 143 Oystercatcher, Black, 71

Palmer, T. S., names of writers on California birds, 66; Botta's visit to California, 159; an early experiment in keeping hummingbirds in captivity, 168; the oldest American ornithologist, 166 Pandion haliaëtus carolinensis, 34, 117, 135 Parabuteo unicinctus harrisi, 142 Passer domesticus, 39, 60, 69 Passerculus sandwichensis alaudinus, 16, 39, 138 sandwichensis bryanti, 60, 69 sandwichensis sandwichensis, 16 sandwichensis savanna, 68 Passerella iliaca, 138 iliaca megarhyncha, 165 iliaca meruloides, 130 iliaca monoensis, 165 iliaca schistacea, 138, 165 iliaca stephensi, 165 Passerina amoena, 41, 61, 139 Pedioecetes phasianellus columbianus. 32. Pelecanus californicus, 102

erythrorhynchos, 30, 133, 178 Pelican, California Brown, 56, 102 White, 30, 44, 133, 178 Pelidna alpina sakhalina, 134 Pemberton, J. R., notes on the grasshopper sparrow, 24 Penthestes atricapillus septentrionalis, 41, 140 carolinensis agilis, 164 gambeli gambeli, 41, 140, 164 rufescens barlowi, 61 Petrel, Ashy, 58 Fork-tailed, 141 Kaeding, 58, 71, 185 Petrochelidon lunifrons lunifrons, 41, 61, 139 Pewee, Western Wood, 36, 52, 133, 136, 169 Peyton, S. B., large sets of eggs of California woodpecker, 103; western goshawk in Ventura county, California, 103; early nesting of the California brown pelican on Anacapa island, California, 112 Phalacrocorax auritus albociliatus, 58, 186 pelagicus resplendens, 59, 71 penicillatus, 59, 186 Phalaenoptilus nuttalli californicus, 129 nuttalli nuttalli, 36, 136, 163 Phalarope, Northern, 32 Wilson, 134, 167 Phasianus torquatus, 59, 135, 187 Pheasant, Ring-necked, 59, 126, 135, 187 Phoebe, Black, 60, 158, 169 Say, 132, 133, 136, 156 Pica pica hudsonia, 37, 121, 137 Picus nataliae, 63 Pigeon, Band-tailed, 98, 162 Pinicola enucleator montana, 39 Pintail, 16 Pipilo crissalis crissalis, 170 maculatus falcifer, 61 maculatus megalonyx, 169 maculatus montanus, 139, 164 Pipit, American, 139 Piranga hepatica hepatica, 164 ludoviciana, 41, 139 rubra cooperi, 164 Pisobia bairdi, 25, 77, 142 Planesticus migratorius propinquus, 43, 61, 140, 185, 186 Plover, Black-bellied, 16 Semipalmated, 25 Podilymbus podiceps, 58, 133 Pooecetes gramineus affinis, 130 gramineus confinis, 39, 138

Poor-will, 36, 136, 163

plumbeus, 165

Porzana carolina, 32, 134, 168

minimus minimus, 61

Psaltriparus melanotis lloydi, 165

Dusky, 129

Ptychoramphus aleuticus, 58 Puffin, Tufted, 58, 71 Puffinus opisthomelas, 173 Pyrocephalus rubinus mexicanus, 25, 102

Quail, California, 135 California Valley, 23, 59, 159, 187 Mearns, 162 Mountain, 134 Plumed, 169, 187 Querquedula cyanoptera, 134 discors, 32

Rail, Sora, 32, 134, 168 Virginia, 59 Rallus virginianus, 59 Raven, 132, 137 Northern, 17 Western, 57, 155, 158 White-necked, 163 Ray, M. S., some further notes on San Francisco county birds, 170 Recurvirostra americana, 32, 101, 134 Redhead, 134 Redpoll, 129 Red-tail, Alaska, 16 Western, 34, 162 Red-wing, San Diego, 133, 137 Thick-billed, 39 Tri-colored, 176 Regulus calendula calendula, 42, 140 satrapa olivaceus, 42 Richards, W. W., wild ducks in a city park,

Roadrunner, 23, 143, 155, 160, 162 Robin, Eastern, 62 Western, 43, 46, 61, 97, 99, 140, 176, 185,

Roc, 171

85

Riparia riparia, 41, 61, 139

Rust, H. J., an annotated list of the birds of Fremont county, Idaho, as observed during the summer of 1916, 29

Sage-hen, 133, 135 Salpinctes obsoletus obsoletus, 41, 61, 140 Sandpiper, Aleutian, 16 Baird, 25, 77, 141 Bartramian, 162 Buff-breasted, 187 Pectoral, 79 Red-backed, 134 Semipalmated, 79 Spotted, 16, 32, 134 Western, 32 Western Solitary, 162 Sapsucker, Red-breasted, 104 Williamson, 62, 136

Sayornis nigricans, 60, 169 savus, 136 Schaefer, O. F., occurrence of the redbreasted nuthatch in Arizona, 103 Schussler, G. W., the surf bird at San Francisco, 101; nesting of the California brown towhee in San Francisco, 170 Scoter, Surf. 16 White-winged, 16

Scudder, B. A., review of his "conservation of our wild birds", 74 Selasphorus alleni, 60 platycercus, 36 rufus, 136, 163, 168 Sell, R. A., some notes on the effect on bird

life of the Corpus Christi storm of August 18, 1916, 43 Shearwater, Dark-bodied, 57 Shelton, A. C., review of his "a distributional list of the birds of west central Oregon", 174

Shepardson, D. I., notes from the southern Sierras, 168 Shrike, California, 25, 61, 143

White-rumped, 41, 133, 139 Sialia currucoides, 43, 140 mexicana anabelae, 169 mexicana occidentalis, 140 Siskin, Pine, 39, 49, 60, 61, 130, 138

Sitta canadensis, 103, 140 carolinensis aculeata, 140 carolinensis nelsoni, 140, 164 pygmaea, 140

Skinner, M. P., the ospreys of the Yellowstone, 117; the birds of Molly Island, Yellowstone National Park, 177 Smith, A. P., some birds of the Davis moun-

tains, Texas, 161 Smith, F. J., the snowy owl in Humboldt county, California, 24

Snipe, Wilson, 32, 134 Solitaire, Townsend, 13, 14 Sparrow, Aleutian Savannah, 16 Bell, 143, 156, 186 Brewer, 37, 39, 133, 138, 139 Bryant Marsh, 60, 69

Clay-colored, 163 English, 39, 60, 62, 69, 145 Fox. 138 Gambel, 138 Golden-crowned, 16, 130, 138

Intermediate, 130 Lincoln, 40, 130, 138 Merrill Song, 138 Mono Fox, 165 Mountain Song, 34, 40 Nevada Sage, 142 Nuttall, 9, 46, 60, 101, 170

Oregon Vesper, 130 Rufous-crowned, 130

Rusty Song, 99 Sage, 37, 38, 39, 133, 138 Salt Marsh Song, 61 San Diego Song, 102 Santa Cruz Song, 61 Savannah, 68 Scott, 163 Slate-colored, 133, 138 Western Chipping, 9, 39, 138 Western Grasshopper, 24 Western Lark, 133, 138 Western Savannah, 39, 69, 138 Western Vesper, 39, 40, 138 White-crowned, 9, 25, 37, 39 Yakutat Fox, 130

Yakutat Song, 16 Speotyto cunicularia hypogaea, 60, 136, 162 Sphyrapicus thyroideus, 62, 136 thyroideus nataliae, 63, 65 thyroideus thyroideus, 63, 64 Spinus pinus pinus, 39, 60, 130, 138 Spiza americana, 164 Spizella breweri, 39, 138 pallida, 163 passerina arizonae, 39, 138 Sprig, 85

Squatarola squatarola, 16 Squires, W. A., and Hansen, H. E., a list of the birds breeding in San Francisco county, California, 54

Squires, W. A., is the California woodpecker a tippler?, 69; some field notes for 1917, 185

Steganopus tricolor, 134, 167 Stellula calliope, 136, 142, 169 Sterna caspia, 182, 187

Stilt, Black-necked, 157 Storer, T. I., review of B. A. Scudder's "conservation of our wild birds", 74; Bohemian waxwing in Mariposa county, 103; review of N. M. Ladd's "how to make friends with birds", 144; review of recent publications of E. H. Forbush, 145

Storer, T. I., and Grinnell, J., a new race of fox sparrow from the vicinity of Mono Lake, California, 165

Streptoceryle alcyon alcyon, 162 Strix occidentalis lucida, 69 occidentalis occidentalis, 69 Sturnella neglecta, 39, 60, 137 Surf-bird, 101

Swallow, Bank, 41, 61, 91, 139 Barn, 10, 41, 49, 61, 62, 139 Cliff, 39, 41, 61, 62, 104, 139, 158 Northern Violet-green, 41, 139 Tree, 53, 98, 143

Swan, Trumpeter, 32, 176

Swarth, H. S., geographical variation in Sphyrapicus thyroideus, 62; observations on some Fresno county birds, 129; review of A. T. Wayne's "a list of avian species for which the type locality is South Carolina", 146

Swift, Vaux, 96, 136 White-throated, 3, 26, 163, 169

Tachycineta thalassina lepida, 41, 139 Tanager, Cooper, 164 Hepatic, 164 Scarlet, 52 Western, 41, 52, 139 Tattler, Wandering, 16, 71 Teal, Blue-winged, 32 Cinnamon, 134, 157, 158, 167 Green-winged, 30, 125 Telmatodytes palustris paludicola, 61 palustris plesius, 130, 140 Tern, Black, 133

Caspian, 182, 187 Thrasher, California, 159 Curve-billed, 164 Leconte, 143 Palmer, 104

Sage, 35, 41, 133, 140, 143 Thrush, Alaska Hermit, 130, 140 Audubon Hermit, 43, 165 Hermit. 46 Monterey Hermit, 186 Northern Varied, 130 Russet-backed, 46, 48, 61, 96, 98, 99, 142 Varied, 9, 46, 100, 140 Willow, 43

Thryomanes bewicki eremophilus, 164 bewicki spilurus, 61 Titmouse, Black-crested, 164 Gray, 103

Plain, 61 Totanus melanoleucus, 16, 134 Towhee, California Brown, 58, 170 Green-tailed, 36, 41, 130

Mountain, 164 San Francisco, 61 Spurred, 139, 169

Toxostoma curvirostre curvirostre, 164 lecontei, 143 Trochilus colubris, 168 Troglodytes aedon parkmani, 41, 61, 130, 140 Tryngites subruficollis, 187 Turkey, Australian Brush, 88 Turnstone, Black, 16 Tyler, J. G., nesting of the Wilson phala-

rope near Fresno, California, 167 Tyrannus tyrannus, 136

verticalis, 36, 136, 170 vociferus, 163

Uria troille californica, 58, 71

Veery, 48

Vermivora celata celata, 130 celata lutescens, 61, 130, 139

rubricapilla gutturalis, 139 Vireo, Cassin, 41, 133, 139, 164

Hutton, 61

Stephens, 164 Western Warbling, 41, 61, 139, 169

Vireo huttoni huttoni, 61 huttoni stephensi, 164

Vireosylva gilva swainsoni, 41, 61, 139, 169 Vulture, Turkey, 32, 57, 135

Walker, Alex., some birds of central Oregon, 131

Warbler, Audubon, 41, 49, 133, 139, 143

Black-throated Gray, 139

Calaveras, 139

California Yellow, 61, 139, 169

Golden Pileolated, 11, 50, 61, 98, 170

Lutescent, 61, 98, 130, 133, 139 Macgillivray, 139

Myrtle, 142

Orange-crowned, 130

Pileolated, 139 Sonora Yellow, 164

Tolmie, 41

Townsend, 139, 164

Yellow, 41

Warburton, S., another instance of lead poisoning in ducks, 141; another record of the European widgeon from the state of Washington, 142; cases of early nesting in the state of Washington, 143

Waxwing, Bohemian, 103, 128, 141 Cedar, 41, 96, 103, 141

Wayne, A. T., review of his "a list of avian species for which the type locality is South Carolina", 146

Wear, Winifred N., notes from the Fresno district, 142

Wetmore, Alexander, an abnormal egg of Fulica americana, 65

Widgeon, European, 142

Wiley, Leo, nesting of Harris hawk in southeastern California, 142

Willet, Western, 134, 156

Willett, G., further notes on the birds of Forrester island, Alaska, 15; another Alaska record for the mourning dove, 22; some April nesting notes from the vicinity of Buena Vista Lake, Kern County, California, 143

Wilsonia pusilla chryseola, 61, 170 pusilla pileolata, 139

Wood, C. A., review of his "the fundus oculi of birds especially as viewed by the ophthalmoscope", 174

Woodpecker, Alpine Three-toed, 175

Batchelder, 35

California, 69, 103

Downy, 52

Gairdner, 52

Lewis, 136

Pileated, 9, 46, 97

Queen Charlotte, 17

Rocky Mountain Hairy, 33, 35, 133, 136

Southern White-headed, 169

Texas, 162

White-headed, 63, 133, 136

Wren, Baird, 156 Cactus, 155

Desert, 164

Dotted Canyon, 130, 140

Rock, 41, 61, 130, 133, 140, 156

Seattle, 97, 98

Tule, 61

Vigors, 61

Western House, 41, 61, 130, 140

Western Marsh, 130, 140

Western Winter, 49, 51, 73, 100, 140

Wren-tit, Coast, 49

Intermediate, 56 Wyman, L. E., fork-tailed petrel and Baird

sandpiper in southern California, 141; that goshawk invasion again, 185 Wythe, Margaret W., Sierra junco breeding

at Berkeley, 185

Xanthocephalus xanthocephalus, 37, 137

Xema sabini, 16

Xenopicus albolarvatus albolarvatus, 63 albolarvatus gravirostris, 63, 169

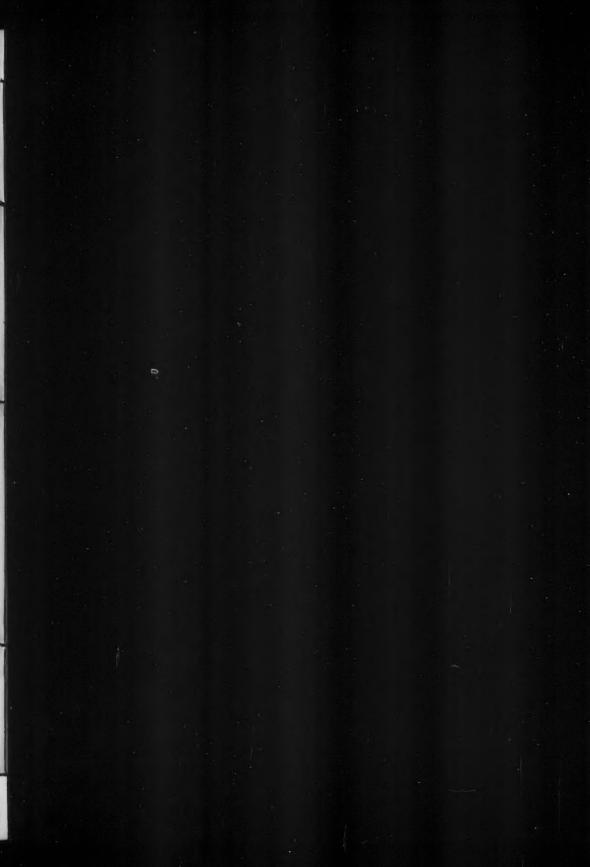
Yellow-legs, Greater, 16, 134, 173 Yellowthroat, Salt-marsh, 61 Western, 133, 139

Zamelodia melanocephala, 41 melanocephala capitalis, 61

Zenaidura macroura, 22

macroura carolinensis, 32 macroura marginella, 59, 135

Zonotrichia coronata, 16, 130, 138 leucophrys gambeli, 138 leucophrys leucophrys, 39 leucophrys nuttalli, 60, 170





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